

## REMARKS

The Office Action dated December 15, 2011, has been carefully considered. Claims 1-6, 11, and 23-36 are pending. Claims 7-10 and 12-22 have been canceled without prejudice or disclaimer of the subject matter therein. Claims 33-35 have been withdrawn from consideration as allegedly directed to a non-elected invention. Upon allowance of a generic claim, Applicant requests that Claims 33-35 be rejoined. Applicant requests that the Examiner consider the following remarks, and pass the application to allowance.

### **Rejection - 35 U.S.C. §103**

Claims 1-5, 1, 23-27, and 29-32 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Williams, U.S. Patent No. 3,594,021 (hereinafter "Williams") in view of Waterhouse, U.S. Patent No. 5,499,882 (hereinafter "Waterhouse").

According to the Examination Guidelines for Determining Obviousness, 72 Fed. Reg. 57526, 57528 (Oct. 10, 2007), Office personnel must resolve the Graham factual inquiries and then articulate the following:

(1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference;

(2) a finding that one of ordinary skill in the art could have combined the elements as claimed by known methods, and that in combination, each element merely would have performed the same function as it did separately;

(3) a finding that one of ordinary skill in the art would have recognized that the results of the combination were predictable; and

(4) whatever additional findings based on the Graham factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness. *Id.*

In *Ex Parte Whalen*, 89 USPQ2d 1078 (BPAI 2008), the Board articulated that "obviousness cannot be proven merely showing that the elements of a claimed device were known in the prior art" (emphasis added). The Board stated that to demonstrate obviousness, "it must be shown that those of ordinary skill in the art would have had some 'apparent reason' to combine the known elements in the fashioned claimed." *Id.* (quoting *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007)) (emphasis added).

The Official Action alleges:

In regards to claim 1, Williams discloses a pipe coupling (16) comprising: an elongated housing having a first end and a second end, the housing defining an elongated bore therein; a stop (20) located on an inner diameter of the housing, . . .

. . .

Williams does not disclose an angle between the first cylindrical bore and the second cylindrical bore is about 15 degrees to about 165 degrees. Waterhouse teaches couplings (1, 5, 6, 9, 13, 14) with an angle between a first cylindrical bore and a second cylindrical bore being about 15 degrees to about 165 degrees, to employ different angels for conventional plumbing (col. 1, lines 45-57). As Waterhouse relates to geometrical structures using plumbing joints, it would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricated couplings with an angle between a first cylindrical bore and a second cylindrical bore being about 15 degrees to about 165 degrees, to employ different angles for conventional plumbing, as taught by Waterhouse. (See pages 3 and 4 of the Office Action).

However, one of ordinary skill in the art would not have had some apparent reason to fabricate an expansion joint as suggested with an angle between the first cylindrical bore and the second cylindrical bore of between about 15 degrees and 165 degrees, since the function of the expansion joint of Williams is to provide the inspecting code official with the positive proof that the joint can perform its desired

function. On the contrary, the functionality of the expansion joint would be compromised, if operated at an angle as recited in the pending claims.

Williams relates to an expansion joint for thermoplastic piping for drain, waste and vent uses. The expansion joint includes a barrel or first sleeve 16 into which is telescoped a piston or second sleeve 18. The first sleeve is made of a suitable transparent vinyl plastic material so that the exact location of the moving piston or second sleeve can easily be seen. (See col. 2, lines 6-10 of Williams). The second sleeve or piston 18 has a bell flange 24 at its outer end which is adapted to receive the pipe 12 for solvent welding the latter to the sleeve 18. The sleeve also has annular grooves 26 around its periphery which are seated O-rings 28 for providing a seal between the outer surface of the sleeve 18 and the inner surface of the sleeve 16 when the former is telescoped into the latter, as illustrated in the drawing. (See col. 2, lines 16-24 of Williams).

As set forth above, it would be undesirable to have a telescoping piston as suggested by Williams at an angle of between 15 degrees and 165 degrees as recited in Claims 1, 11, and 23, since the second sleeve or piston 18 is not fixed or solvent welded within the barrel or first sleeve 16. Furthermore, by not fixing or solvent welding the second sleeve or piston 18 within the barrel or first sleeve 16, the second sleeve or piston 18 would undergo not only a vertical force, but also a horizontal force. Thus, the operation of the second sleeve or piston 18, if operated at an angle as suggested in the Office Action, would present an additional point of failure, i.e., an additional horizontal force, rather than providing positive proof that the joint can perform its desired function as taught. Accordingly, since it would go against the teachings of Williams to have the expansion joint include barrel or first

sleeve 16 having one end at angle, which receives a second sleeve or piston 18, Claims 1, 11, and 23 should be allowable.

Waterhouse relates to redundant joints for a wide variety of redundant-joint structures having three-way plumbing elbows with coupling sleeves into which two-way plumbing elbows are inserted and rotated to form an infinite variety of angles of joining edges or sides of structural assemblies bordered by cylindrical beams inserted into sleeves in the two-way elbow. Waterhouse, however, does not cure the deficiencies of Williams, and as such, Claims 1, 11, and 23 should be allowable. Claims 2-5, 24-27, 29-32, and 36 are dependent from Claims 1, 11, and 23, and should be allowable for the reasons set forth above.

Claims 1, 6, 11, 23, and 28-31 were rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Williams, U.S. Patent No. 3,594,021 (hereinafter "Williams") in view of Webb et al., U.S. Patent No. 4,676,241 (hereinafter "Webb").

Webb relates to a connector swivel for connecting between a supply tube and an endotracheal tube, which accommodates movement of the patient. Webb, however, does not cure the deficiencies of Williams as noted above, and as such, Claims 1, 6, 11, 23, and 28-31 should be allowable.

### **Conclusion**

It is respectfully submitted that the claims are presently in condition for immediate allowance, and such action is requested. If, however, any matters remain that can be clarified by the Examiner's amendment, the Examiner is cordially invited to contact the undersigned by telephone at the number below. In the event that

there are any questions concerning the amendments or the application in general, the Examiner is respectfully urged to contact the undersigned so that prosecution may be expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 22, 2011

By: /Kirk M. Nuzum/

Kirk M. Nuzum  
Registration No. 38,983

**Customer No. 21839**  
703 836 6620